

NEW RECORDS OF BUTTERFLIES (LEPIDOPTERA) FROM THE PORT MACQUARIE AREA, NEW SOUTH WALES

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Abstract

Southern range extensions are provided for *Doleschallia bisaltide australis* C. & R. Felder, *Euploea tulliolus tulliolus* (Fabricius) and *Euchrysops cnejus cnidus* Waterhouse & Lyell, together with additional records of *Argynnia cyrila* Waterhouse & Lyell and *Zizula hylax attenuata* (Lucas) from the mid-north coast and hinterland of New South Wales.

Introduction

Braby (2000) and Common and Waterhouse (1981) recorded the distributions of various eastern Australian butterfly species as extending from the Queensland tropics to the north coast of New South Wales. Preserved areas of rainforest and high altitude forest on the mid-north coast of NSW, in particular near Port Macquarie, might be able to support species dependent on these environments, either as remnant populations or during southern population movements during suitable climatic periods. Between 2004 and 2008, several butterfly species were newly recorded in the area.

New records and observations

NYMPHALIDAE

Doleschallia bisaltide australis C. & R. Felder, 1867

Three adults were observed flying in littoral rainforest at Miners Beach in Sea Acres Nature Reserve, Port Macquarie, in February 2006. They were in varying degrees of wear and a further, fresh individual was observed in the same area on 12 March 2006. On 16 January 2007, an adult was observed along Stoney Creek Road at Middle Brother National Park, near Laurieton. A further adult was observed at Miners Beach on 26 September 2007. The distance between these sightings is 33 km. On 10 April 2008, a late instar larva was collected at the first author's home in Wauchope (located between the previous two sightings), feeding on *Pseuderanthemum variabile* (R. Br.) Radlk. (Acanthaceae). It pupated on 21 April and the adult [in A. Moore collection] emerged 29 days later on 19 May. The southern range limit for this species was previously recorded as Clarence River near Grafton (Braby 2000, Common and Waterhouse 1981) and these observations represent a range extension of approximately 200 km to the south. It is possible that this species was imported to the area on nursery stock, but the observations have all been in remnant rainforest and at all locations, including A. Moore's home, the larval food plant is native to the area. At Middle Brother NP, the location is not close to any dwellings. *D. b. australis* appears to be established in this area. The food plant *P. variabile* occurs as far south as Bega in southern NSW (NSW Flora Online 2008).

Euploea tulliolus tulliolus (Fabricius, 1793)

This species was observed, possibly ovipositing, in littoral rainforest at Miners Beach in Sea Acres Nature Reserve, Port Macquarie, on 12 March 2006. The previously recorded southern range limit for this species was Urunga (Common and Waterhouse 1981) and this new record extends the range 104 km to the south, although establishment is not confirmed.

Argynnis cyrila Waterhouse & Lyell, 1914

Specimens, including mating pairs and ovipositing females, were observed in large numbers at the summit of North Brother Mountain on 19-21 September 2007. Both sexes were also observed at Honeysuckle Rest Area in Barrington Tops National Park on 12 October 2007, confirming a previous sighting by Russell Mayo. Braby (2000) inferred a discontinuous distribution that corresponded with the data points in Dunn and Dunn (1991). The current observations provide new data points for previously recorded gaps in the known distribution.

LYCAENIDAE

Euchrysops cnejus cnidus Waterhouse & Lyell, 1914

A fresh adult male and female were collected at Forbes River, Birdwood on 25 March 2004, flying with *Everes lacturnus australis* Couchman. The southern range limit for this species was previously listed as Coffs Harbour (Braby 2000) and near Guyra (Dunn and Dunn 1991). This record extends the southern range limit by 140 km.

Zizula hylax attenuata (Lucas, 1890)

Glen Innes is the listed southern limit for this species, with occasional sightings recorded at Denman, Wingham and Sydney (Dunn and Dunn 1991). Three adults were collected at Forbes River, Birdwood on 25 March 2004, further suggesting that this species' range is spreading southwards.

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